

IN THE CLAIMS:

Please amend the claims as follows:

1. (Currently Amended) Method of charging a rechargeable device, comprising the following steps:
 - a) connecting the rechargeable device to a battery connection port and ground;
 - b) feeding a current reference value to a control unit;
 - c) feeding a voltage reference value to the control unit;
 - d) determining a duty cycle in accordance with the current reference value and the voltage reference value fed to the control unit;
 - e) switching, using the duty cycle, an output voltage applied to the rechargeable device between a minimum output voltage and a maximum output voltage dependent on the current reference value and the voltage reference value by means of a charging switch; and
 - f) disconnecting the charged rechargeable device;wherein the method further comprises the following step:
 - g) connecting an external DC source having an input voltage to an input resistor of a charging apparatus, wherein a transistor voltage drop across the charging switch is minimized in order to reduce a power dissipated by the charging switch -transistor; ~~and that, in step e),~~
 - h) wherein the duty cycle provided by the control unit is determined by the input voltage and the charging state of the rechargeable device.
2. (Previously Presented) Method of charging a rechargeable device according to claim 1, wherein a soft switching using the transistor is provided to avoid electromagnetic interference problems.
3. (Currently Amended) Method of charging a rechargeable device according to claim 1, wherein an average output voltage between [[a]] the minimum output

voltage and [[a]] the maximum output voltage is applied to the rechargeable device.

4. (Previously Presented) Method of charging a rechargeable device according to claim 1, wherein charging voltages above a voltage level as specified by battery manufacturers for a specific rechargeable device are avoided.
5. (Previously Presented) Method of charging a rechargeable device according to claim 1, wherein power dissipated by the input resistor exceeds the power dissipated by the transistor to reduce the power dissipated inside the charging apparatus.
6. (Previously Presented) Charging apparatus for charging a rechargeable device, including:
 - a) a battery connection port for connecting the rechargeable device to the charging apparatus;
 - b) a control unit for the determination a duty cycle in accordance with a current reference value and a voltage reference value fed to the control unit; and
 - c) a charging switch for switching according to the duty cycle, an output voltage applied to the rechargeable device between a minimum output voltage and a maximum output voltage dependent on the current reference value and the voltage reference value,

wherein the charging apparatus further comprises:

- d) an input resistor for connecting an external DC source having an input voltage to the charging apparatus, wherein
 - i) a transistor voltage drop across the charging switch is minimized in order to reduce a power dissipated by the charging switch - transistor;

- ii) the input resistor is installed separately from the charging apparatus to deposit the power dissipated by the input resistor outside the charging apparatus; and
 - iii) the duty cycle provided by the control unit is determined by the input voltage and the charging state of the rechargeable device.
- 7. (Previously Presented) Charging apparatus for charging a rechargeable device according to claim 6, wherein the charging switch is a transistor.
- 8. (Previously Presented) Charging apparatus for charging a rechargeable device according to claim 6, wherein the charging apparatus is connectable to a commercial AC adapter.
- 9. (Currently Amended) Charging apparatus for charging a rechargeable device according to claim 6, wherein the external DC source ~~having an input voltage which is connected to an input resistor of a charging apparatus~~ is a car battery.